



# PYROCAST SC70 AL

## NON-WETTING DENSE SILICON CARBIDE REFRACTORY

Pyrocast SC70 AL exhibits excellent abrasion resistance, high corrosion resistance and excellent mechanical strength even after high temperature exposures or firings.

### COMPOSITION

Material	Approximate Percentage of Weight
SiC	64%
Al <sub>2</sub> O <sub>3</sub>	18%
SiO <sub>2</sub>	11%
CaO	1.6%
Other	5.4%

### BENEFITS

- Excellent abrasion resistance
- Long service life
- Low maintenance

### APPLICATIONS

- Crucible bottom linings
- Furnace door surrounds
- Ladle impact tiles
- Ladle liners
- Tap hole blocks
- Tapping troughs
- Transfer troughs

### PHYSICAL PROPERTIES

Property	Value
Maximum Service Temperature	1200°C (2192°F)
Permanent Linear Change–Shrinkage	-0.25%
Density–g/cm <sup>3</sup> (lb/in <sup>3</sup> )	2.67 (0.096)
Cold Modulus of Rupture–MPa (psi)	40 (5801.51)
Hot Modulus of Rupture–MPa (psi)	44 (6381.66)
Cold Crushing Strength–MPa (psi)	125 (18,129.70)
Corrosion Resistance	Good to moderate
Abrasion Resistance–cm <sup>3</sup> (in <sup>3</sup> )	1.9 (0.12)
Thermal Conductivity–W/m·K (BTU·in/ft <sup>2</sup> ·hr·°F)	
at 171°C (329°F)	1.713 (11.90)
at 335°C (619°F)	2.347 (16.30)
at 492°C (919°F)	2.863 (19.90)
at 656°C (1173°F)	3.915 (27.20)

### HEALTH AND SAFETY

Prior to use, refer to the product safety data sheet for proper handling and required personal protective equipment.

